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REMARKS

Claims 1-22 and 25-27 are now pending in the present application. Claims 1, 17, 19, 22 and 26 have been amended. Reconsideration of the claims is respectfully requested. This response is submitted in response to the Final Office Action dated August 24, 2006 and the subsequent Advisory Action dated December 18, 2006.

I.   35 U.S.C. § 102

Claims 1-8, 11-22 and 25-27 were rejected under 35 U.S.C. § 102 (e) as being anticipated by Beser (US Patent 6,049,826). The Examiner directs the Applicant to Fig 5 and Fig. 7A-7B and col. 13, lines 25 to col. 17, line 50 of Beser as support for the rejection. In the Advisory Action, the Examiner maintains that the unique device identifier, as stated in the applicant's specification, is the MAC address contained in chaddr-field (see Fig. 6, 132, column 17, lines 5-19). Furthermore, it is widely known in the art that a MAC address is a unique device identifier. Therefore Beser still meets the scope of the limitations as currently claimed. The Examiner further maintains that Beser does teach receiving configuration based on unique device identifier. More specifically, Beser teaches sending basic configurations details (col. 17, lines 5-40) that comprise an IP address (Fig. 6, 124,126) and the MAC address which is the unique device identifier (Fig. 6, 132). The Examiner concludes that the configurations details are based in part on the unique device identifier, and thus Beser still meets the scope of the limitations as currently claimed.

A prior art reference anticipates the claimed invention under 35 U.S.C. § 102(b) only if every element of a claimed invention is found in a single prior art reference.

As Beser describes in the Background of the Invention, in a typical cable modem initialization scenario DHCP is used to obtain an IP address and to obtain the name of a configuration file on a DHCP server from which configuration parameters and the addressable IP address are obtained. The DHCP initialization process sends a DHCP Discover request to the DHCP servers and receives back a random IP address. Once an IP address is obtained, the cable modem obtains the name of the configuration file. Each DHCP has an identical copy of the same configuration file, and thus each modem is configured exactly the same way. Since cable modems are made by different

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manufacturers and used for different purposes, a single common configuration file is inappropriate for all modems.

Beser then describes a process that allows a dynamic protocol server to override a request for a standard configuration file whose name is supplied to a cable modem in a DHCP response message during initialization. Beser transmits a standard DHCP Discover request (step 142, FIG. 7a) including the MAC address, receives multiple DHCP Offer messages that include random IP addresses and acknowledges one. The server performs a reverse DNS lookup of the selected IP address. Based on the determined identity of the cable modem, the server constructs a new configuration file specifically for the cable modem and transmits it to the cable modem. Beser's approach allows different configuration files to be provided for different types of cable modems using a standard DHCP discover request but does not allow for the configuration files to be associated with a particular cable modem and user. Users of the same type of cable modem may subscribe to different services.

Applicant's use of a unique device identifier allows unique configuration data to be associated with a particular IP device and user. This approach requires the DHCP discover request be modified to include both the standard MAC address and the unique device identifier. Applicant disagrees with the Examiner's assertion that the MAC address is a unique device identifier as claimed. Although it is true that a MAC address uniquely identifies a piece of hardware, it is not true that the MAC address for the piece of hardware is associated with a unique user at the server prior to configuring the device nor is it true that the original MAC address is received at the server. DHCP requests are proxied as they cross intervening networks between two devices and the MAC address of the proxy device is relayed forward. P. 17, lines 15-18 of the present application states "It should be stressed that the unique gateway identifier is not merely a MAC address, but rather a unique number, such as a serial number, that has been associated with a specific and unique gateway and therefore a specific and unique user."

To provide further clarity, claim 1 as amended specifies broadcasting a request that includes both a MAC address and a unique bi-directional IP communication device identifier. P. 14, lines 10-13, state "The DHCPDISCOVER message preferably includes the DSL gateway's network hardware address (MAC address), a list of DHCP options the

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DSL gateway supports, a unique gateway identifier (Bi-directional IP communication identifier), such as a serial number 222 (Figure 2), ...". Furthermore, the unique device identifier is associated with a unique user <u>at the server prior to configuration</u> (p. 17, lines 18-21). The unique basic configurations details are then <u>assigned</u> based on the unique device identifier associated with the unique user at the server (p. 12, lines 26-31 and p.17, lines 22-24). Beser does not assign unique basic configurations details to the IP device based on the original MAC address because (a) the original MAC address is not associated with a unique user at the server prior to configuration and (b) the original MAC address is not received at the server.

As stated above, the unique device identifier is not merely a MAC address. If the MAC address were suitable for matching unique basic configuration details to unique users/devices it would have been used in order to preserve the standard DHCP Discovery Request. Unfortunately, the MAC address is not suitable for the desired purpose. Each interface of an IP device has a globally unique MAC address taken from semi-tracked pools of available numbers. To associate the IP device with a unique user as the server prior to configuration, the MAC address would have to be carefully tracked and coordinated from the manufacturing center where it was issued, through testing, serial number assignment, delivery to a distributor and finally issuance to a customer. By comparison a separate unique device identifier such as the serial number only needs to be tracked once at the point of issuance to the customer where the serial number is assigned to the unique user. Furthermore, DHCP requests are typically proxied, relayed and assisted on their way as the request crosses intervening networks such as a carrier's ATM network from the originating IP device to the DHCP server. The MAC address of the proxy is used to relay the DHCP request from one broadcast domain to another (since MAC level communications without IP addresses cannot be routed), and thus the original MAC address is not actually passed to the server. Thus the DHCP server cannot individually identify the IP device that issued the request. Normally this is not an issue because DHCP servers transmit the same configuration details varying only in an incremental IP address issued.   However, Applicant's invention is directed at downloading unique configuration details that are uniquely associated with a unique user and unique IP device. Even if the original MAC address were tracked and associated

with a unique user at the server, which it is not, the original MAC address is not received at the server due to the proxy and thus the configuration details cannot be assigned based on the original MAC address. The use of a MAC address in general and as taught by Beser does not meet the scope of the limitations as currently claimed.

Claims 1, 17, 19, 22 and 26 include features that are not disclosed in Beser, therefore this 102 rejection based upon Beser is not valid. Applicant respectfully requests withdrawal of this rejection with respect independent claims 1, 17, 19, 22 and 26 and with respect to dependent claims 2-16, 18, 20-21, 25 and 27.

II.   35 U.S.C. § 103

Claims 9-10 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Beser in view of Huotari (US Pub No. 2002/0004935). The rejections of claim 9-10 are overcome in view of the arguments provided above.

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Conclusion

It is respectfully urged that the subject application is patentable over the cited references and is now in condition for allowance.

The Examiner is invited to call the undersigned at the below listed telephone number if, in the opinion of the Examiner, such a telephone conference would expedite or aid the prosecution and examination of this application.

Respectfully submitted,

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